

Appl. No.: 09/652,322
Amdt. dated June 21, 2004
Reply to Office action of April 7, 2004

REMARKS/ARGUMENTS

Applicants received the final Office Action dated April 7, 2004, in which the Examiner: (1) rejected claims 1-5, 13-14, 22-24 and 26-29 as obvious in view of U.S. Patent No. 5,970,232 ("Passint") and U.S. Patent No. 5,987,518 ("Gotwald"); and (2) rejected claims 6-12 and 15-21 as obvious in view of Passint, Gotwald and U.S. Patent No. 6,282,195 ("Miller"). In this Response, Applicants amend claims 1, 14, 23 and 24. Applicants also add claims 30-46. Claims 1-46 are pending. Based on the arguments and amendments contained herein, Applicants respectfully request reconsideration and allowance of the pending claims.

I. CLAIM REJECTIONS

A. CLAIM 1

Amended claim 1, in part, requires a "router [that] prioritizes message packets based upon...size of the message packet" (supported, at least, on page 25, lines 4-9, of Applicants' specification). None of the references cited by the Examiner teaches or suggests this limitation. Specifically, Passint teaches that the router chips 50 do not assume any particular message length (see col. 11, lines 23-25) and, therefore, does not teach or suggest "a router" that "prioritizes message packets based upon size of the message packet" as required in claim 1. Further, Gotwald teaches that priority can be based on source address, destination address, the data type and the connection type (see col. 4, lines 61-64). However, Gotwald does not teach or suggest a router that "prioritizes message packets based upon size of the message packet" as required in claim 1. None of the references cited by the Examiner, nor combinations of the references, teaches or suggests the above limitation. For at least this reason, Applicants submit that claims and all claims that depend from claim 1 are allowable.

B. CLAIM 14

Amended claim 14, in part requires "reduc[ing] routing latency...by assigning message packets already in transit higher priority than new message packets and by implementing a combination of type-based and least-recently-granted routing algorithms for both message packets already in transit and new

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message packets" (supported, at least, on page 26, lines 1-18, of Applicants' specification). None of references cited by the Examiner teaches or suggest this limitation.

While Passint teaches prioritizing messages based on age and header information (see col. 11, lines 27-30 and 56-58), Passint does not teach or suggest that header information and age are related to prioritization based on "message packets already [being] in transit" as required in claim 14. Also, while Gotwald teaches that priority can be based on source address, destination address, the data type and the connection type, Gotwald does not teach or suggest "assigning message packets already in transit higher priority than new message packets" as required in claim 14.

Further, neither Passint nor Gotwald teaches or suggest "implementing a combination of type-based and least-recently-granted routing algorithms for both message packets already in transit and new message packets" as required in claim 14. The Examiner recognizes that Passint does not teach or suggest prioritizing message packets based on type (see Office Action, page 3, last paragraph) and cites Gotwald as teaching prioritizing based on message type. However, Gotwald only teaches that priority can be based on source address, destination address, the data type and the connection type. Gotwald does not teach or suggest "implementing a combination of type-based and least-recently-granted routing algorithms for both message packets already in transit and new message packets" as required in claim 14. None of the references, nor combinations of the references, cited by the Examiner teaches or suggests the above limitations. For at least these reasons, Applicants submit that claim 14 and all claims that depend from claim 14 are allowable.

C. CLAIM 23

Amended claim 23, in part, requires that "message packets that pass through at least three microprocessors to reach a destination are given highest priority" (supported, at least, on page 5, lines 6-8 and page 25, lines 4-9, of Applicants' specification). None of the references cited by the Examiner teaches or suggests this limitation.

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As described previously, Passint teaches basing priority on header information and age, while Gotwald teaches basing priority on source address, destination address, the data type and the connection type. However, neither Passint nor Gotwald, nor a combination of Passint and Gotwald, teaches or suggests that "message packets that pass through at least three microprocessors to reach a destination are given highest priority" as required in claim 23. For at least these reasons, Applicants submit that claim 23 and all claims that depend from claim 23 are allowable.

D. CLAIM 24

Amended claim 24, in part, requires that "each network input port and each microprocessor input port is assigned a different priority and wherein all network input ports have higher priority than the microprocessor input ports" (supported, at least, on page 26, lines 1-18, of Applicants' specification). None of the references cited by the Examiner teaches or suggests these limitations.

As described previously, Passint teaches basing priority on header information and age, while Gotwald teaches basing priority on source address, destination address, the data type and the connection type. However, neither Passint nor Gotwald, nor a combination of Passint and Gotwald, teaches or suggests that "each network input port and each microprocessor input port is assigned a different priority and wherein all network input ports have higher priority than the microprocessor input ports" as required in claim 24. For at least these reasons, Applicants submit that claim 24 and all claims that depend from claim 24 are allowable.

II. NEW CLAIMS

Claim 30, in part, requires "a router" that "assigns the network ports higher priority than the microprocessor ports and prioritizes message packets associated with each of the network ports and each of the microprocessor ports according to a predetermined prioritization and according to a least-recently-granted prioritization" (supported, at least, on page 16, lines 1-18). None of the references cited by the Examiner teaches or suggests these limitations.

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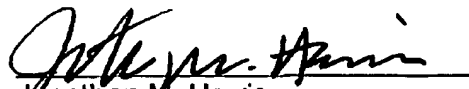
As explained previously, Passint teaches basing priority on header information and age, while Gotwald teaches basing priority on source address, destination address, the data type and the connection type. However, neither Passint nor Gotwald, nor a combination of Passint and Gotwald, teaches or suggests "a router" that "assigns the network ports higher priority than the microprocessor ports and prioritizes message packets associated with each of the network ports and each of the microprocessor ports according to a predetermined prioritization and according to a least-recently-granted prioritization" as required in claim 30. For at least these reasons, Applicants submit that claim 30 and all claims that depend from claim 30 are allowable.

III. CONCLUSIONS

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. If any fees or time extensions are inadvertently omitted or if any fees have been overpaid, please appropriately charge or credit those fees to Hewlett-Packard Company Deposit Account Number 08-2025 and enter any time extension(s) necessary to prevent this case from being abandoned.

Respectfully submitted,


Jonathan M. Harris
PTO Reg. No. 44,144
CONLEY ROSE, P.C.
(713) 238-8000 (Phone)
(713) 238-8008 (Fax)
ATTORNEY FOR APPLICANTS

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
Legal Dept., M/S 35
P.O. Box 272400
Fort Collins, CO 80527-2400